

ABSTRACT**IMPROVED SEMICONDUCTOR LASER**

There is disclosed an improved semiconductor laser device (10). Previous high power (greater than a few hundred milliwatts output) semiconductor lasers suffer from a number of problems such as poor beam quality and low brightness. The invention therefore provides a semiconductor laser device (10) including at least one portion which has been Quantum Well Intermixed (QWI) and means for providing gain profiling within an active portion of the device (10). In a preferred implementation the device (10) provides a Wide Optical Waveguide (WOW).

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